



Solar Pack

EN Installation instructions

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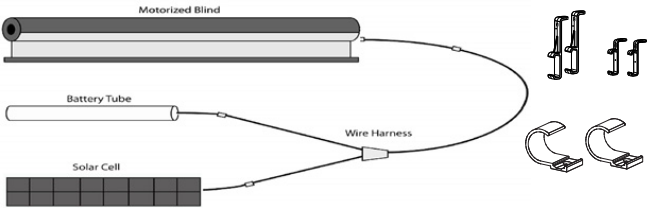
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1. INTRODUCTION

The Solar Pack is a group of components that work in unison as a long life energy source for Somfy 12 Volt WireFree™ motors. **This Product is designed for indoor use only.**

Contents of the Pack include:

- (1) Solar Panel in Bezel
- (1) Empty Battery Tube (for 10AA NiMH batteries #9018621 sold separately)
- (1) Wire Harness
- (1) Glass-Mount Adhesive
- (1) Alcohol wipe
- (1) Instructions
- (1) Solar Panel Mounting Brackets (2" & 4")
- (1) Wall Mount Clips For Battery Tube (set of 2)
- (1) Motor cable for connection to motors referenced (#1001683, #1000494, #1000678)



Note: This product is designed to meet the energy requirements of Somfy 12 Volt WireFree™ Motor applications. This Solar Pack should be used for «single motor shades», meaning that two (2) or more motors should never be connected to one (1) solar pack source. Please reference the Solar Pack performance tables for recommended usage.

2. SAFETY

2.1 Safety and Responsibility

Before installing and using this product, please read the installation guide carefully. It is recommended that Solar Pack be installed by a professional motor installer, for whom these instructions are intended. Care must be taken for both new and existing installations due to the physical mounting location of the motorized window covering - likely at the top of an interior window. Consequently, pay attention to your personal safety in regards to proper use of ladders. Care must also be taken to not drop hand tools or Solar Pack components from an extended height. Any usage outside of applications defined by Somfy constitutes noncompliance, and is therefore not covered by the warranty. In this event, as for all usage not consistent with the instructions given herein, Somfy accepts no responsibility for harm or damage. Never begin installing without first checking the compatibility of this product with the associated equipment and accessories.

Power Sources for 12 Volt WireFree™ Motors		
WireFree™ Motor	Battery Tube	Solar Pack
Roll Up WireFree	√	√
Cord Lift WireFree	√	√
Tilt WireFree	√	√
Tilt&Lift WireFree	√	√

2.2 Specific Safety Advice

- 1) Never pierce the solar panel or its bezel frame.
- 2) Never put anything onto the solar panel (risk of scratching or breakage), especially during installation.
- 3) Once installed, never subject the wire harness or other components to strain, pinching, or cutting caused by moving objects.
- 4) Dispose of electronic components and batteries in accordance with local laws. Do not incinerate.
- 5) Never immerse this product in liquid (s).
- 6) Avoid Impacts
- 7) Do not recharge the batteries with any charger other than a Somfy Solar Charger #9018620.

The solar panel is a fragile part. Do not drop it. If Dropped, do not install as damage may not be visibly detectable and reduced performance may occur.

Refer to the Instruction Manual or Contact your Somfy Representative.

3. INSTALLATION

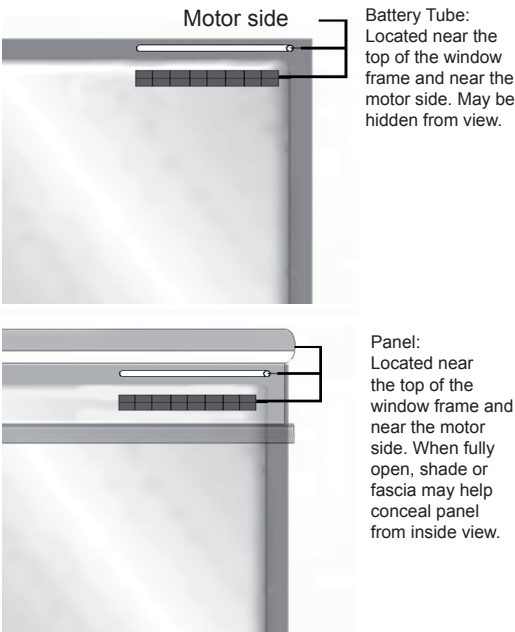
3.1 Determine Location of Solar Panel

The solar panel must always be installed indoors, and should be positioned to allow as much natural light as possible to reach the panel.

Caution! Never install the solar panel on any window glass allowing less than 65% light transmission (including Low E glass and/or window tinting), or obstructed by a window pane or bug screen. Always leave the photovoltaic cells unobstructed, do not put anything in front of them.

The three components which make up the Solar Pack must be installed on the same side as the WireFree™ motor.

Somfy recommends that all components be fitted systematically in order that all components may be connected to the wire harness easily, and that the wire harness does not interfere with the free movement of the interior window covering.



3.2 Mounting the Solar Panel.

Caution! It is imperative that window hardware or framing does not collide with the solar panel!

Careful! Do not damage the wire harness cables during installation.

Determined the position of the solar panel (against window, within reach of wire harness) prior to application of 2-sided tape to insure proper adhesion the first time. Use brackets when direct-to-glass mounting is not advisable (see section 3.2.2) Please refer to the corresponding instructions.



3.2.1 Glass Mounting

Caution! To insure a secure adhesive hold over a long period, prepare the inside window glass prior to mounting the solar panel.

Important! The adhesive tape should never be touched directly with fingers (or other contaminates) prior to adhesion.

- 1) Clean solar panel bezel corners and window area with alcohol prep pad. Let dry for two minutes.
- 2) On a table, with the solar panel facing up, apply the 2-sided adhesive to four corners of the solar panel bezel.

Note: The tape is precut for your convenience in between the top (facer) and bottom (backer) liners. With your fingers, lift off each precut adhesive piece so that it remains attached to the “facer” material and the opposite side of the tape should then be released from the back liner. See Photo in **Figure 1** and **Figure 2**.

- 3) Remove the “facers” of the applied adhesive. Position the bezel with solar panel facing to outdoors , then press entire panel with firm, even pressure into the glass for 10- 15 seconds. The panel is now supported by the adhesive to glass bond but will require 24 hours of cure time to allow full strength characteristics. Do not disturb during this period.

Figure 1.
Glass Mount Adhesive

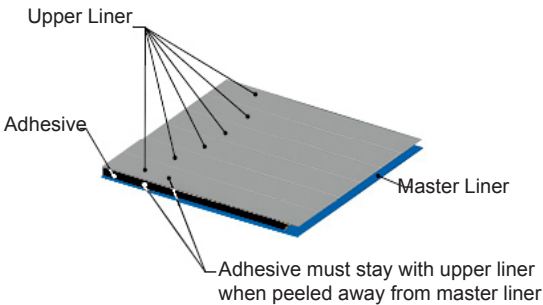
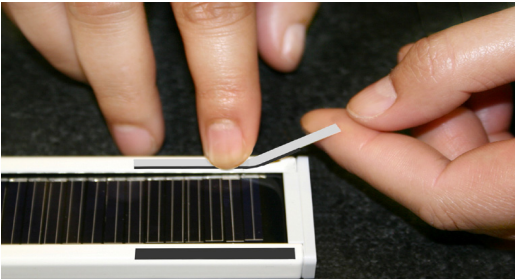


Figure 2.
Apply to all 4 corners



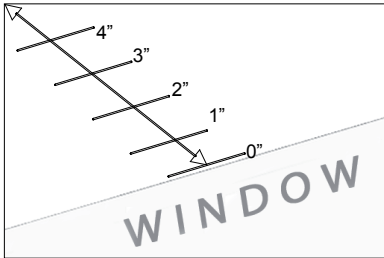
3.2.2 Off Glass Mounting

These instructions are for off-glass mounting of the Solar Pack solar panel. Use the brackets (ref 9015897) when direct-to-glass mounting is not advisable, including the following conditions : to avoid collisions with moving windows (ex. casement or double-hung) or to mount to headrails (2» Tilt) or «roll-up cassettes».

Step 1. Determine best solar panel mounting Location. Attach brackets to solar panel assembly so that solar panel faces towards the glass.

- A. Offset from Glass = 0" (Flush) – 4" maximum. **See Figure 1.**
- B. Choose either 2" drop or 4" drop brackets for best location with the application.

Figure 1.

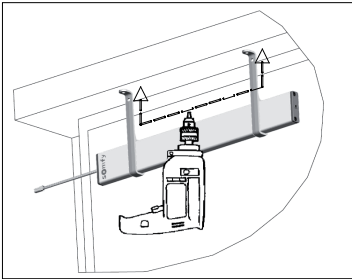


Step 2. Window Frame Mounting:

- A. For inside top of window frame mounting, place assembly in exact position and mark the hole location. **See Figure 2.**
- B. Remove Solar Panel from brackets and affix brackets to window frame with wood screws.
- C. Reinsert Solar Panel into proper position by snapping solar panel into brackets. Complete Solar Pack Installation as instructed.

Skip remaining steps.

Figure 2.



Step 3. Head Rail or Roll-Up Cassette Mounting:

A. If new installation, determine whether 2" drop or 4" drop brackets best fit the application. The brackets should be oriented so that the solar panel will have direct access to daylight without blockage or shadows. Refer to Figure 1 for maximum offset from glass.

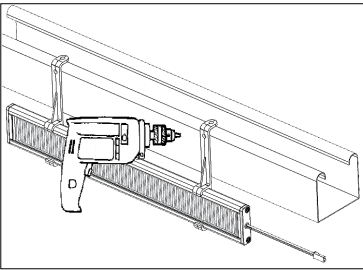
If existing window covering installation, remove the window shade in order to determine which brackets best fit the application. The brackets should be oriented so that the solar panel will have direct access to daylight without blockage or shadows. Refer to Figure 1 for maximum offset from glass.

B. Depending upon head rail or cassette design, choose the horizontal or vertical hole orientation which provides best placement for mounting screws. Mark exact hole locations. **See Figure 3.**

Note: Cassettes will likely require upper hole location with screws driven in vertically. 2" venetian tilt or cord lift head rails will likely require lower screw hole and horizontal screw placement.


- C.** Utilize self-tapping machine screws to mount brackets into position.
- D.** Reinsert solar panel into proper position by snapping solar panel into brackets.
- E.** Mount Interior Window covering assembly into window.
- F.** Complete Solar pack installation as instructed.

Figure 3.



3.3 Battery Tube

The battery tube is shipped empty. Somfy recommends batteries 10 AA NiMH #9018621 which are sold separately.



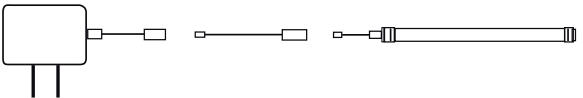
To maintain user safety and ensure optimum performance, you must use Low Discharge (2000mAh) NiMH batteries that incorporate safety venting. Failure to do so may void Somfy warranty.


3.3.1 Battery Preparation

Have a service professional fully charge the battery using the compatible Somfy Solar Pack Rapid Charger (Ref #9018620 - Solar Pack Charger).

Solar Pack Charger (Ref #9018620)
-sold separately.

Open battery tube and install 10 AA NiMH batteries inside as shown on the battery tube label.






Battery must be fully charged prior to installation.

3.4 Battery Tube Install Location

Once the batteries installed in the tube, the battery tube assembly can be secured and hidden from view either behind, inside or next to the window covering product hardware. The battery tube is compatible with Somfy Mounting Clips designed for Shangri-La (REF# 9013266) & Silhouette® (REF#9013264) window covering products. For outside of headrail mounting, battery tube wall mounting clips (#9013263) are included in the pack, for either vertical or horizontal positioning. For blinds with box head rails, room may exist to place the battery inside the rail without interference.

SOLAR PACK BATTERY TUBE MOUNTING CLIPS (OPTIONAL)

Shangri La Mount Clips REF# 9013266	Silhouette Mounting Clips REF# 9013264
	
Headrail Mounting	Headrail Mounting




Caution! If installing the battery vertically, always position it with the cable output upwards to reduce unrestrained wire from catching the shade.



Vertical Battery Tube connector orientation

4. CONNECTIONS

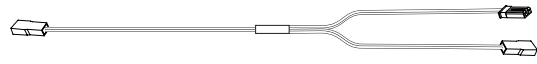


Caution! The wiring harness connecting the Solar Pack components must be protected from the movement of the motorized window covering.
Caution! Do not change the configuration of this system to include different connectors.

Motor Connector

Battery Tube Connector

Solar Panel Connector

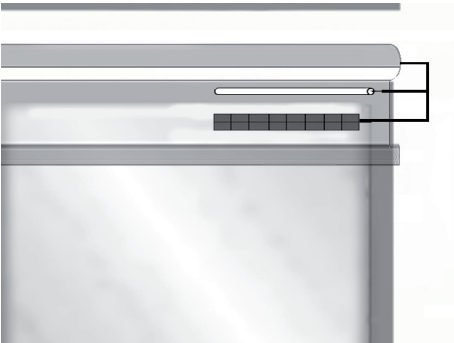


- 1) Connect the wire harness to the motor.
- 2) Connect the solar panel to the wire harness
- 3) Connect the battery tube to the wire harness

5. COMMISSIONING

5.1 Activation of Motor

If the Solar Pack is being installed as an upgrade to an existing Somfy WireFree™ motorized shade installation, there is no need to reprogram the motor.
If the Solar Pack is being installed with a new Somfy WireFree™ motor, follow the motor installation guide.



Standard Installation Plan of Roll-Up Shade.

6. PRODUCT IN USE

6.1 Normal Operation

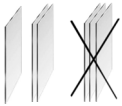

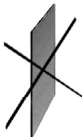





After commissioning, the battery is trickle-charged by electrical energy generated by the solar panel. The energy is stored in the high capacity NiMH battery (acting like a reservoir) and the system provides uninterrupted service through many climatic seasons. It is normal for the battery to gain more energy in summer as compared to winter – the Solar Panel converts the intensity of light to energy upon availability.




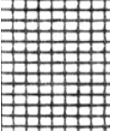
6.2 Excessive Energy Use

 **Caution!** If daily motor activations exceed recommended cycles per day as stated in the Solar Pack Performance Chart, the solar panel will not be able to “replenish” the battery as designed.

If the motorized shade does not operate due to an excessively diminished battery, the battery may require a full recharge. This may be done with a Somfy Solar Pack Charger (#9018620). If the battery no longer provides adequate power to operate your motor, new NiMH batteries should be installed in the battery tube. There should be no need to replace any other Solar Pack components.

7 WINDOW APPLICATION TABLES & GUIDELINES

Window Type		 <table><tr><td colspan="2">ENERGY PERFORMANCE RATINGS</td></tr><tr><td>LIGHT TRANSMISSION</td><td>0.30</td><td>0.30</td></tr><tr><td colspan="2">ADDITIONAL PERFORMANCE RATINGS</td></tr><tr><td>VISIBLE TRANSMITTANCE</td><td>0.65</td><td>0.2</td></tr></table>	ENERGY PERFORMANCE RATINGS		LIGHT TRANSMISSION	0.30	0.30	ADDITIONAL PERFORMANCE RATINGS		VISIBLE TRANSMITTANCE	0.65	0.2		
	ENERGY PERFORMANCE RATINGS													
LIGHT TRANSMISSION	0.30	0.30												
ADDITIONAL PERFORMANCE RATINGS														
VISIBLE TRANSMITTANCE	0.65	0.2												
	SINGLE OR DOUBLE PANE OK	LIGHT TRANSMISSION 65% OR GREATER	WINDOW TINTING	INSIDE WINDOW ONLY										
Moving Window														
	FIXED WINDOW	DOUBLE HUNG	SLIDING	CASEMENT										
Concern	Clean Install	Caution: Avoid Panel Collision	Caution: Avoid Panel Collision	Caution: Panel Movement Will tug or tear Harness										
Suggestions		Limit Screw in track	Limit Screw in Track	Cable tie near corner										

Avoid		
	AWNINGS OR DEEP ROOF EVES	WINDOW DIVIDERS OVERLAPPING SOLAR PANEL
Avoid		
	VEGETATION BLOCKING LIGHT	BUG SCREENS

8 TIPS AND RECOMMENDATIONS FOR USE

During Installation	The motor does not work	1. Verify wires have secure connection, and that wires are not cut. 2. Verify battery has been charged to 100%. 3. See Troubleshooting Section of Specific Motor (Roll-Up, Cord-Lift, Tilt or Tilt & Lift User Manual).
	Solar Panel does not adhere to glass after initial application.	1. Remove panel and adhesive. Clean glass with glass prep pad. Dry. Apply new adhesive as directed.
	Sliding window collides with solar panel after mounting.	1. Install a window bumper to prevent collision. 2. Install optional solar panel mounting bracket.
	Solar Pack loses charge BEFORE 3-5 years of use.	1. Recharge battery to 100% with Solar Pack Charger #9018620. 2. Review Section 7.0 Window Application Tables & Guidelines or request Solar Pack Performance Chart to service provider.
After Installation	Solar Pack loses charge AFTER 3-5 years.	Purchase new 10AA NiMH batteries and install them in the battery tube.